

LOCUS	CIU39835	1201 bp	mRNA	linear	PLN 18-JAN-1996
DEFINITION	Coccidioides immitis immunoreactive cell wall protein mRNA, complete cds.				
ACCESSION	U39835				
VERSION	U39835.1	GI:1161373			
KEYWORDS					
SOURCE	Coccidioides posadasii				
ORGANISM	Coccidioides posadasii Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes; Onygenales; mitosporic Onygenales; Coccidioides. 1 (bases 1 to 1201) Dugger, K.O., Villareal, K.M., Nguyen, A., Zimmermann, C.R., Law, J.H. and Galgiani, J.N. Cloning and sequence analysis of the cDNA for a protein from Coccidioides immitis with immunogenic potential Biochem. Biophys. Res. Commun. 218 (2), 485-489 (1996) 96144702 8561782 2 (bases 1 to 1201) Dugger, K.O. and Galgiani, J.N. Direct Submission Submitted (01-NOV-1995) Kist O. Dugger, Infectious Diseases, University of Arizona, 1501 N. Campbell, Tucson, AZ 85724, USA Location/Qualifiers 1. .1201				
TITLE					
JOURNAL					
REFERENCE					
AUTHORS					
FEATURES					
SOURCE					

```

CDS
    152..736
        /note="33 kDa apoglycoprotein"
        /codon_start=1
        /product="immunoreactive spherule cell wall protein"
        /protein_id="AAC49140.1"
        /db_xref="GI:1161374"
        /translation="MORSHALIALVAAGLAQAQFDLPPLCLNCFEVALGNDGCTRLTDFKHCCKPELPGCOITCEVEACPDADATISVNTVDCCSAGAVDIDIPVDITAAPAPSTAEPTAETPTEPTAETPAETPAETPHEPTPTAVFTGTGGVPTGTGSFVTGSPSTAETPAEFPGAGNVVASVGIAALAAFLAAYLT"
BASE COUNT
    249 a      369 c      275 g      308 t

```

Alignment Scores:		
Pred. No.:	8.4e-06	Length: 1201
Score:	82.00	Matches: 18
Percent Similarity:	100.00%	Conservative: 0
Best Local Similarity:	100.00%	Mismatches: 0
Query Match:	100.00%	Indels: 0
DB:	8	Gaps: 0

US-10-081-935-2 (1-18) x CIU39835 (1-1201)

Vy 1 metglnpheserhsalaleuilealaleuvalalaaaglyleualaserala 18
 |||||
 Db 152 atgcagttcttcacgctctcatcgcttcgctgcctgcggcctcgccacgtgcc 205

[illegible]

REFERENCE
1 (bases 1 to 1234)
Zhu, Y., Yang, C., Magee, D. M. and Cox, R. A.
Molecular cloning and characterization of Coccidioides immitis
antigen 2 cDNA
J. Immun. 64 (7), 2695-2699 (1996)

FEATURES

Location/Map:

MEDLINE 960294782
 PUBMED 8658497
 REFERENCE 2 (bases 1 to 1234)
 AUTHORS Cox, R.A.
 TITLE Direct Submission
 JOURNAL Submitted (27-JUL-1995) Texas Center for Infectious Disease,
 Research Immunology, 2303 S.E. Military Drive, San Antonio, TX
 78223, USA
 COMMENT On Feb 24, 1996 this sequence version replaced gi:1184058.
 FEATURES location/Qualifiers
 SOURCE 1..1234

gene
CDS

polyA_site

BASE COUNT	/note="21 A nucleotides"			
ORIGIN	252 a	383 c	277 g	322 t

```

Alignment Scores:      8.64e-0
Pred. No.:            82.00
Score:                 100.00%
Percent Similarity:    100.00%
Best Local Similarity: 100.00%
Query Match:          100.00%
DB:                    8

```

US-10-081-935-2 (1-18) x CIU32518. (1-1234)

175 ATGCACTTCTACGCTTCATGCTCGTGGCTCGGGCTCGCACTGCC 228

RESULT 3
CIU51200

DEFINITION	Coccidioides immitis antigen 2 protein	linear	PLN 14-JAN-1997
ACCESSION	U51200		
VERSION	1		
FEATURES	1..1056	aa	
ORIGIN	1151200		

KEYWORDS	Coccidioides posadasii
SOURCE	Coccidioides posadasii
ORGANISM	Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes Oryzales; microsporitic Oryzales; Coccidioides. 1 (bases 1 to 1435)
REFERENCE	
AUTHORS	Zhu, Y., Tang, C., McGee, D. M. and Cox, R. A.
TITLE	Coccidioides immitis antigen 2: analysis of gene and protein
JOURNAL	Gene 181 (1-3), 121-125 (1996)

REFERENCE
AUTHORS
TITLE
JOURNAL
2 (Pages 1 to 1435)
Zhu, Y., Yang, C., Magee, D.M. and Cox, R.A.
Direct Submission
Submitted (12-MAR-1996) Rebecca A. Cox, Clinical Investigation,
Texas Center for Infectious Disease, 2303 S.E. Military Dr., San
Antonio, TX 78223, USA

C10 = 39835

TITLE	Cloning and sequence analysis of the cDNA for a protein from Coccidioides immitis with immunogenic potential					
JOURNAL	Biochem. Biophys. Res. Commun. 218 (2), 485-489 (1996)					
MEDLINE	96144702					
PUBMED	8561782					
REFERENCE	2 (bases 1 to 1201)					
AUTHORS	Dugger,K.O. and Gaigiani,J.N.					
TITLE	Direct Submission					
JOURNAL	Submitted (01-NOV-1995) Kris O. Dugger Infectious Diseases, University of Arizona, 1501 N. Campbell, Tucson, AZ 85724, USA					
SOURCE	Location/Qualifiers 1..1201					
CDS	/organism="Coccidioides posadasii" /mol_type="mRNA" /strain="Silveira" /db_xref="taxon:199306" 152..736 /note="33 kDa apoglycoprotein" /codon_start=1 /product="immunoreactive spherule cell wall protein" /protein_id="AAC49140.1" /db_xref="GI:1161374" /translation="MQFSHALALVAAGLSAQPDIPPCALNCFEALGNDGCTRLTDFKCHSKPELPQITPCEVEACPLDARISVNIVDCSAVGPIIDPVDTAAEDPSFEAPTEPTAEPTAEPTAEPTAEPTAEPTAEPTAVPTGTGGVFTGSGFVTGRPLATSPFPFGASGNVASVGIAALLGLAAYL"					
BASE COUNT	249 a 369 c 275 g 308 t					
ORIGIN						
Query Match	100.0%; Score 52; DB 8; Length 1201;					
Best Local Similarity	100.0%; Pred. No. 3.5e-05;					
Matches	52; Conservative 0; Mismatches 0; Indels 0; Gaps 0;					
OY	1 ATGCAGTTCTCTCACGCTTCATCGCTCTGTCGCTGCCGCGCTCCGCAAGTG 52 Db 152 ATGCAGTTCTCTCACGCTTCATCGCTCTGTCGCTGCCGCGCTCCGCAAGTG 203 					
RESULT 2						
LOCUS	CIU32518 1224 bp mRNA linear PLN 04-NOV-1996					
DEFINITION	Coccidioides immitis antigen 2 (Ag2) mRNA, complete cds.					
ACCESSION	U32518					
VERSION	U32518.1 GI:1200179					
KEYWORDS	Coccidioides posadasii Coccidioides posadasii Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes; Onygenales; mitosporic Onygenales; Coccidioides. 1 (bases 1 to 1234) Zhu,Y., Yang,C., Magee,D.M. and Cox,R.A. Molecular cloning and characterization of Coccidioides immitis antigen 2 cDNA Infect. Immun. 64 (7), 2695-2699 (1996)					
ORGANISM						
REFERENCE						
AUTHORS						
TITLE						
JOURNAL						
MEDLINE						
PUBMED						
REFERENCE						
AUTHORS						
TITLE						
JOURNAL						
COMMENT	Direct Submission Submitted (27-JUN-1995) Texas Center for Infectious Disease, Research Immunology, 2303 S.E. Military Drive, San Antonio, TX 78223, USA On Feb 24, 1996 this sequence version replaced gi:1184058.					
FEATURES	Location/Qualifiers 1..1234					
SOURCE						

```

/gene="ng2"
/notes="major T-cell-reactive component of mycelia and
spherule cell walls"
/codon_start=1
/product="antigen 2"
/protein_id="AAB148.1"
/db_xref="GI:1200180"
/translation="MQSFHALIALVAAGLASAQLPDIPPCALGFVIALGNDGTRTTL
DKFKASRDELPGQITPCVEEACPLDARISSNTVVOCSAVGAVIDIIPDITTAABED
SEIETPAEAPTEETPAETPAETPAETPEETPAVTPTGGGVPTGSSFTVTR
PTASTPAEFPAGNSIVRASVGIAALLGLAAYL"
polya_site
/size="733"
1234

```

```

BASE COUNT          333 a          414 c          327 g          361 t
ORIGIN
/note="21 A nucleotides"
BASE COUNT          252 a          383 c          277 g          322 t
ORIGIN
Query Match          100.0%; Score 52; DB 8; Length 1234;
Best Local Similarity 100.0%; Pident. No. 3,5e-05;
Matches 52; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY
1 ATGAGATTCTCTACGCTCTCATGCTCTGTGTCGTCGCGGCTTCGCGAGTG 52
|||||
Dn 175 ATGAGATTCTCTACGCTCTCATGCTCTGTGTCGTCGCGGCTTCGCGAGTG 226
|||||
RESULT 3
LOCUS CUU51200 1435 bp DNA linear PLN 14-JAN-1997
DEFINITION Coccidioides immitis antigen 2 protein gene, complete cds.
VERSION U51200
ACCESSION U51200
KEYWORDS U51200.1 GI:1256443
SOURCE Coccidioides posadasii
ORGANISM Coccidioides posadasii
Eukaryota; Fungi; Ascomycota; Pezizomycotina; Eurotiomycetes;
Onygenales; Mitosporic Onygenales; Coccidioides.
REFERENCE 1 (bases 1 to 1435)
AUTHORS Zhu, Y., Yang, C., Magee, D.M. and Cox, R.A.
TITLE Coccidioides immitis antigen 2: analysis of gene and protein
JOURNAL Gene 181 (1-2), 121-125 (1996)
MEDLINE 97128779
PUBMED 8973319
2 (bases 1 to 1435)
AUTHORS Zhu, Y., Yang, C., Magee, D.M. and Cox, R.A.
TITLE Direct Submission
JOURNAL Submitted (12-MAR-1996) Rebecca A. Cox, Clinical Investigation,
Texas Center for Infectious Disease, 2303 S.E. Military Dr., San
Antonio, TX 78223, USA
FEATURES
source
1..1435
/organism="Coccidioides posadasii"
/mol_type="genomic DNA"
/strain="Silveria"
/db_xref="taxon:199306"
join(175..255,334..472,575..939)
/codon_start=1
/product="antigen 2"
/protein_id="AAC49612.1"
/db_xref="GI:1256444"
/translat="MQPSHALIALVWAGLSAQQLPDIPPCALNCFEALNDGCTRLT
DPFKCSKPELPQGITCEVEBACPLDAI SVSNIVDCSAGVYIDIPVDITAAPEP
PSFEAEPTEPTAEPTEPTAEPTEPTAEPTEPTAEPTEPTAEPTEPTAEPTEPTA
PTAETPAEPFAGSNVFAVSGVIAALLGLAAY"
BASE COUNT          333 a          414 c          327 g          361 t
ORIGIN

```

```

Query Match          100.0%; Score 52; DB 8; Length 1435;
Best Local Similarity 100.0%; Pred. NO. 3.5e-05;
Matches 52; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGCAATTCTTCACGCTCTCATGCGCTTCGCTGCGGAGCTGCGCAGNG 52
|||||

```